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# Solving Wicked Problems *in an Increasingly Complex World*

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## The world is becoming increasingly wicked...

- Issues once considered tame, understood and mapable are evolving into much more complex and wicked problems that:
  - Have no direct cause & effect
  - Are socially complex
  - Are interrelated and have many interdependencies
  - Are difficult to clearly define
  - Are more difficult to design single thread policy
- This means wicked problems have greater uncertainty and more unintended consequences.





Many of our existing tools are necessary but insufficient...

- Modelling
- Econometrics
- Other tools used to simplify, reduce and predict

We map existing systems as we understand them (test the cause & effect) but have difficulty addressing the resiliency and requirements to deal with wicked problems





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Health Canada is facing an increasing number of complex and interrelated wicked problems:

- Obesity
- Healthy Communities
- Public vs Private

HC is adding tools / approaches that will give us the insight to understand the causal factors that make up wicked problems and learn how to address them





## Foresight is

1. an additional approach to gain insight to complex problems & how to understand, respond to and proactively address them
2. an engagement approach that is socially conducive to more than one organization or party





To conduct foresight we look at conditions that may affect the health system & through this we have a better understanding of:

- The nature of these changes
- How emerging S&T may play a role in maintaining and improving the health of Canadians
- What type enabling policies and programs are required
- The types of partnerships/relationships needed
- How might this knowingly affect our organization





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## Our intention...

- Making anticipatory insights relevant to decision makers





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## Health Canada converts foresight to insight by:

1. Foresight workshops on how S&T can help maintain and improve the health of Canadians
2. Foresight Research
  - a. Explore emergent issues
  - b. S&T briefs on emerging science and technology
  - c. Foresight learnings from around the world
  - d. Foresight methodological study
3. Foresight Engagement:
  - a. Speaker Series - Continue the dialogue of emergent S&T within HC
  - b. Foresight Strategic Analysis – Telfer Foresight Leadership Forum to determine convergence and insights
  - c. Jasper Innovation Forum – an international group looking at the future of health
4. Foresight Tools:
  - a. Portals and Networks
  - b. Collaborative E-space, Virtual Centre of Expertise







## The End Result...

- Extraction of insight (local, regional, provincial, international) to address questions for HC management, decision makers and stakeholders...
  - Understanding the nature of change
  - Role of S&T
  - Enabling environment (policy, regulatory environment, etc)
  - How might change affect our organization
  - Future science priorities and investments (capacity and capabilities)
- Timeframe...
  - Awareness: Year 1
  - Knowledge: Year 2-3
  - Interpretation of change: Years 3-5





# What we learned

- Foresight is a change in culture and it will take times to absorb and implement in the system
- Foresight needs engagement from management and preferably a champion to embrace its learnings
- The future is uncertain and evolves constantly so we need to be vigilant and adaptable
- Presentation of insights needs to be structured in terms of “What’s in it for me?” from a decision maker’s point of view

